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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,777	07/13/2001	James Chen	600057.446C1	5768

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FISH & RICHARDSON, PC  
P.O. BOX 1022  
MINNEAPOLIS, MN 55440-1022

EXAMINER
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CANELLA, KAREN A

ART UNIT	PAPER NUMBER
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1643

NOTIFICATION DATE	DELIVERY MODE
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07/09/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

## Office Action Summary

**Application No.**

09/905,777

**Applicant(s)**

CHEN, JAMES

**Examiner**

Karen A. Canella

**Art Unit**

1643

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 14, 16-18, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9-12, 14, 16, 17, 27 and 28 is/are rejected.
- 7) ☒ Claim(s) 3-8 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### DETAILED ACTION

Claims 1, 2 and 14 have been amended. Claims 13, 15, 25 and 26 have been canceled. Claims 1-12, 14, 16-18, 27 and 28 are pending and under consideration.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 9-12, 14, 16, 17, 27 and 28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12, 15, 16-20, 22-37 of U.S. Patent No. 6,602,274. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are obvious over the claims of the patent. The claims of the patent teach the administration of an antibody targeted photoreactive

compound, wherein the targeted tissue is a solid tumor, a hematopoietic tumor lesions in the vascular system (claims 5 and 6). the claims of the patent teach allowing sufficient time for any unbound targeted photoreactive compound to clear from the subject (claim 2) and irradiation of the subject with an external light source (claim 7) with a fluence rate of about 5mW/cm<sup>2</sup> to about 100mW/cm<sup>2</sup> (claim 18) for about 3 hours to about 24 hours (claim 15). Claim 26 of the patent teaches an antibody which binds to an antigen or a ligand-receptor binding pair, including biotin-streptavidin, chemokine-chemokine receptor and a growth factor-growth factor receptor in a related pre-targeting" method using two antibodies. Claim 28 of the patent teaches delivery of a photosensitizing agent conjugated to a targeted liposome, which fulfills the specific embodiment of claim 9 requiring a delivery system, claim 17 requiring a liposome delivery system and claim 27 requiring a liposome delivery system separately conjugated to the second member of the ligand-receptor binding pair. Claim 12 of the patent teaches photosensitizing agents which fulfill the specific embodiments of the instant claims 9-12 and 28. Claim 1 of the patent teaches that the intensity of the light used for the step or irradiation and the duration of irradiation are such that the target tissue is destroyed while the non-target tissue remains undamaged. The claims of the patent do not specifically teach that the total light dose is 500 joule/cm<sup>2</sup> to 10,000 Joule/cm<sup>2</sup>.

It would have been prima facie obvious at the time that the claimed invention was made to provide a total light dose of 500 joules/cm<sup>2</sup> to 10,000 joules/cm<sup>2</sup>. One of skill in the art would have been motivated to do so by the requirement of claim 18 for irradiating between 5mW/cm<sup>2</sup> and 100mW/cm<sup>2</sup> and the requirement of claim 1 that the duration of the radiation is such that the targeted tissue is destroyed and the non-targeted tissue is undamaged. It is within the purview of the art to determine the total light dose which will result in selective destruction of the targeted tissue using the transdermal irradiation intensity of 5mW/cm<sup>2</sup> to 100mW/cm<sup>2</sup>. Further, one of skill in the art would have been motivated to administer the targeted liposome via intravenous administration as this is a common mode of administration of liposomes to target internal organs.

Claims 3-8 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

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claim and any intervening claims.

All other rejections and objections as set forth or maintained in the prior office action are withdrawn in light of applicant's amendments and arguments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen A. Canella whose telephone number is (571)272-0828. The examiner can normally be reached on 10-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms can be reached on (571)272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karen A Canella/

Primary Examiner, Art Unit 1643